

Allentown Road Bridge
Spanning the Skippack Creek on Allentown Road
(Pennsylvania Legislative Route 46043)
Franconia Township
Montgomery County
Pennsylvania

HAER No. PA-112

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Mid-Atlantic Regional Office
National Park Service
U. S. Department of the Interior
Philadelphia, Pennsylvania 19106

HISTORIC AMERICAN ENGINEERING RECORD

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Allentown Road Bridge

HAER No.PA-112

Location: Spanning the Skippack Creek on Allentown Road
(Pennsylvania Legislative Route 46043) in
Franconia Township, Montgomery County, Pennsylvania

UTM: 18.471190.4459600

Quad: Telford

Dates of Construction: 1837; 1874

Present Owner: Commonwealth of Pennsylvania
Department of Transportation
Transportation & Safety Building
Commonwealth Avenue and Forester Strset
Harrisburg, Psnnsylvania 17120

Present Use: Vehicular bridge

Significance: The Allentown Road Bridge is a representative example
of a small span masonry arch bridge built for 19th
century highway traffic in Pennsylvania. It exhibits
a regional stylistic variation, similar to five
multipl span stone arch bridges built at that time in
Montgomery County. The bridge is one of 144
Pennsylvania highway bridges thematically nominated to
the National Register of Historic Places.

Projsct Information: This documentation was undertaken from August 1987
through December 1987 in accordance with the Memorandum
of Agreemsnt by the Pennsylvania Department of
Transportation as a mitigation measure prior to the
removal of the bridge.

Paula A. C. Spero
Historic Structures Consultant for Penn DOT
Baltimore, Maryland

The Allentown Road Bridge is a multiple arch stone bridge, crossing Skippack Creek in Franconia Township, Montgomery County, Pennsylvania. Built in 1837 of coursed rubble masonry, the bridge consists of twin arches, each measuring 20 feet 1 inch long, capped with solid stone parapet walls, and flanked by long stone wing walls. It was constructed by the county after persistent petitions by Franconia Township residents for necessary services on a public road.

Franconia Township is located in the northernmost section of the county. It was established by decree of the Philadelphia County Court of Quarter Sessions on March 31, 1732. Until 1784, when Montgomery County was established, Franconia Township was part of Philadelphia County. Early roads traversing the township began to be laid out in the third and fourth decade of the 18th century. At that time, residents petitioned the Court of Quarter Sessions in Philadelphia for approval to lay out public roads. The Allentown Road was among the earliest roads built in Montgomery County, Pennsylvania. About 1735-1740, a road was surveyed from "Peter Trexler's" in Lehigh County to Springhouse. Later called the Great Road or the Allentown Road, this road carried traffic from Philadelphia to Allentown.

To service the travelers using the road, several inns or taverns were built on the Allentown Road in Franconia Township as early as 1740, one on the Branch Creek and one in Franconia Square. Traffic on this major route was considerable and, by 1815, the Allentown Road ford at Skippack Creek was considerable inadequate. In February 1815, residents petitioned the county commissioners for a bridge because they and the public in general were greatly inconvenienced:

"..on account of the frequent freshets of water which render it dangerous and often times impracticable to ford the same, that horses have been drowned in attempting to cross it the owners with great peril only saved - that travelers must often lay by, and become burdensome to the neighbors besides their own detention, that the expense of erecting a bridge at the aforesaid creek at the place aforesaid will be too burdensome to the inhabitants of Franconia Township, therefore pray the Honorable Court to appoint judicious men to view the premises and further their prayer in such manner that a bridge may be erected across said creek at the place prayed for and the expense thereof be defrayed by the county."

This request went without response due to the financial "burden the county lay under". Again in August 1826, the county was petitioned to build a bridge at

that site. Franconia Township residents were joined by other residents of Montgomery County in a stronger plea, begging that they "labor under great inconvenience for want of a bridge over Skippack Creek... the ford there being frequently impassable by means of high water and ice..." The 1826 petition met with no response due to sickness of the bridge reviewers.

Again, in 1830, the petition was repeated with the addition that "traveling on said road has been greatly increased within a few years past". By the mid-19th century, at least one of Franconia's inns was thriving. The Franconiaville Hotel was a frequent stopping place on this principal route to Philadelphia from 1829 to 1861. It was located in Franconiaville, now known as Elroy, about one-half mile south of the bridge site. Travelers during that time included large caravans of freight wagons which carried grain, whiskey, produce and livestock to the markets in the city. Other traffic was generated by a local industrial complex. About 1834, Garrett Shoemaker erected a sawmill on Skippack Creek near the proposed bridge site. The operation was expanded in 1886 when Jacob Shoemaker built a steam powered grist mill and a feed store. The mill complex no longer stands, but it is evident in a painting of the bridge which was done in the early 1900s.

November 1834 and November 1835 saw additional petitions for the same bridge. Some progress was made, and a rough sketch dated August 2, 1836, showed a proposal for straightening of the "Present travelled Road" with a bridge scheme for double arches measuring 20 feet each.

Finally, in January 1837, the Montgomery County Commissioners recorded that the bridge over Skippack Creek was to be built. An estimate for \$3,000 was procured for the erection of the bridge, and this sum was appropriated from county taxes. The county contracted with William Moore and Robert Penneman of Plymouth Township for the construction of the bridge. It was reported that the bridge was completed in August 1837, and it was inspected by a county appointed team in October 1837. The inspectors found that the workmanship and materials were not "so good as the contract requires," and the contractors were fined \$240.

The bridge functioned adequately until 1874, when it was deemed in need of repair. A date stone erected at that time on the bridge's west parapet reads "rebuilt by Montgomery County 1874". This information led to the assumption that the bridge was completely reconstructed in 1874. However, there is no evidence to substantiate the assumption. There are no petitions for a new bridge, no contracts for new construction, and no new bridges reported in the annual County Commissioners' reports.

Montgomery County records note that Ezekiel and I. B. Houpt were hired in 1874 to repair two bridges across Skippack Creek, the bridge on Germantown Pike, and the Allentown Road Bridge in Franconia. In the Register of Order issued by the Commissioners of Montgomery County during 1875 and 1876 are records of

payments made to Ezekiel Houpt and I. B. Houpt for bridge repairs on the Skippack Creek bridges. The repairs done to the Allentown Road bridge cost the county \$3,273.71. While no record remains which documents the 1874 repairs, it is likely that Houpt reconstructed the parapet walls, which were built of semi-coursed, roughly squared stones, and contrast with the masonry of the rest of the bridge. At that time, the date stone, executed by a stone carver commissioned by the county, was placed in the parapet wall.

In the middle of the 19th century, the Houpt family of this region produced an unusual number of stone masons and other workmen engaged in building trades. The Houpts were early settlers in Montgomery County, beginning with Samuel Houpt, who bought 97 acres in Upper Dublin Township in 1759. One of them, Isaiah B. Houpt, born in 1817, became a prominent resident of Norristown. Isaiah and his brother, Ezekiel, learned the trade from their father and his two brothers, who were stone masons. Later, Isaiah and Ezekiel formed a partnership, and they had charge of the stonework in numerous big contracts, such as the building of iron furnaces at Spring Mill and Conshohocken, and the construction of bridges. Isaiah B. Houpt made his home in Norristown and served as Register of Wills and as a member of the town council. County newspapers note that by the late 1870s, the widow of Ezekiel Houpt and two of her sons, both masons, also lived in Norristown.

Houpt's repairs carried the bridge into the 20th century. In 1918, problems became severe enough to warrant additional repairs. Plans and specifications were developed by Montgomery County Engineer, James Cresson, and a contract was executed with William Just of Gwynedd Valley, Montgomery County. The major work done at that time is visible in the stone buttresses built on the north and south wing walls. All the walls were repointed, the roadway was resurfaced with crushed stone, and a concrete curb was built. In addition to this, the parapet were capped with concrete coping, replacing the old wooden coping.

Seventy years after the 1918 repairs, the bridge stands in a state of severe deterioration. The damage is substantial, and the latest rehabilitation evaluation has concluded that it is not feasible to repair the bridge.

The Allentown Road Bridge is one of 58 stone highway bridges recently nominated to the National Register of Historic Places. Stone arch bridges are the oldest extant highway bridges in Pennsylvania. Many examples survive through the state, illustrating not only variations typical in masonry arch bridge construction and evolutionary types, but also their application in a variety of transportation uses. A remarkable number of these are highway bridges which continue to carry vehicular traffic; their construction dates range from the 17th century into the 20th century.

The Commonwealth's reputation for stone bridge construction was recorded in 1808 by Secretary of the Treasury Albert Gallatin in his report on transportation in America. He stated that, "...In the lower counties of Pennsylvania,

stone bridges are generally found across all the small streams.." Although both 19th and 20th century bridge historians have concurred that extant early stone masonry structures are poorly represented in America, there is a large number of them in Pennsylvania. They are located primarily in the southeastern and central portions of the state. Ten of the 58 stone arch bridges recently nominated to the National Register are located in Montgomery County.

The Allentown Road Bridge is a representative example of a nineteenth century multiple span stone arch bridge, with a regional variation in its appearance. It is similar stylistically to five other multiple arch stone bridges built in Montgomery County. It has two small span arches which are flanked by very long approach walls. The arched portion is clearly distinguished from the body of the bridge by small built-in recession. When viewed in elevation, the arch spans are differentiated from the approach walls and parapets by this planar distinction. The recessed section describes a rectangle beginning at the exterior spring lines and extending across both arch crowns. The project of the rest of the bridge thus highlights the arched portion. Results of the Pennsylvania highway bridge survey indicate that this recessed feature appears to be peculiar to Montgomery County.

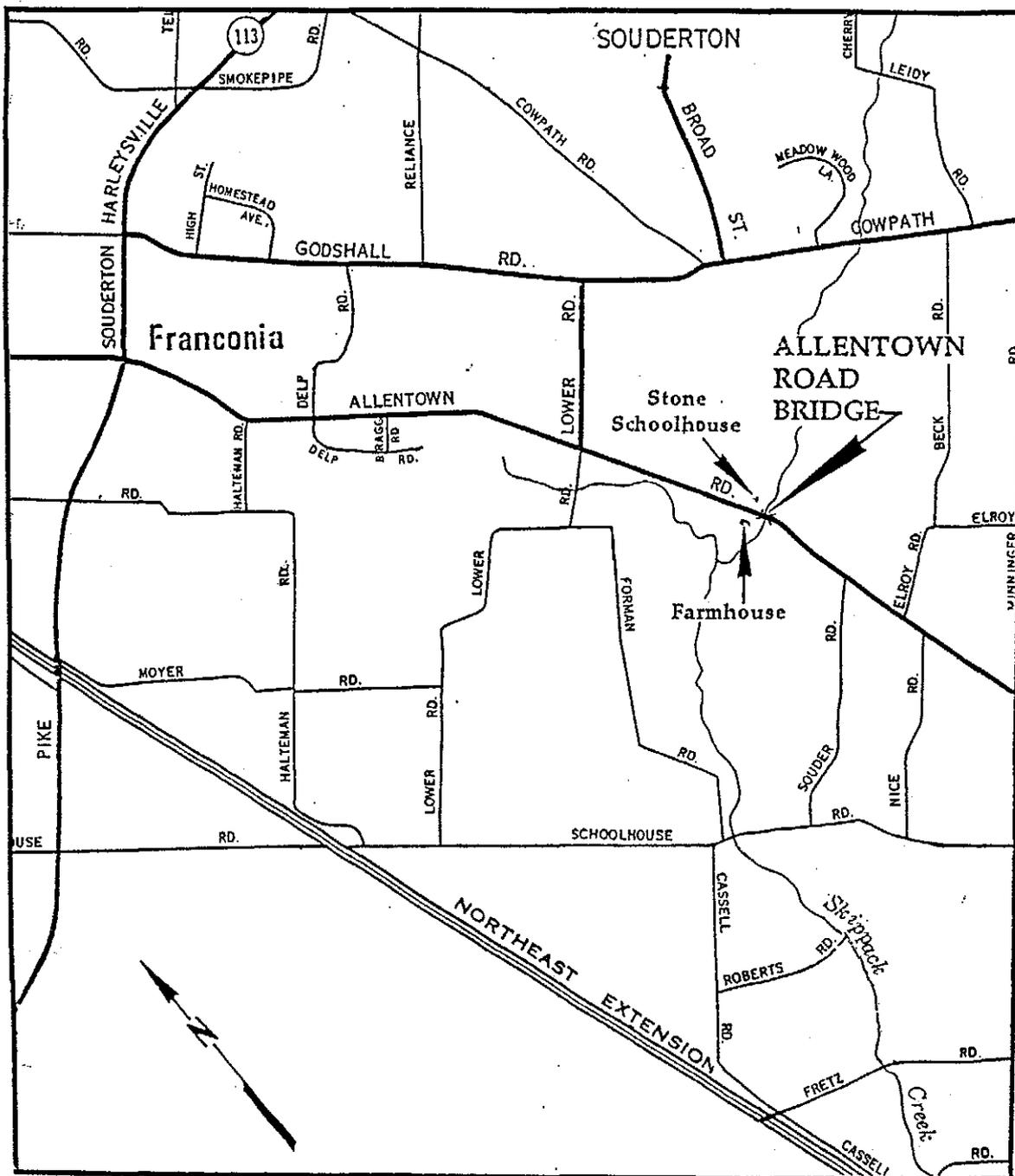
The arched section of the Allentown Road Bridge measures 46 feet 5 inches in length between exterior spring points. On the north side of the arches is a 93 feet long approach/wing wall, and on the south side, the wall measures 60 feet. The bridge was built on an 85 degree skew, measured from the centerline of the roadway to the centerline of the pier. The roadway width is 19 feet 11 inches from face to face of the stone parapets. The parapet walls are 18 inches wide and about 2 feet 7 inches high. They are capped by a 5-inch-thick by 22-inch-wide concrete coping.

Each span of the arches measures 20 feet 1 inch at the spring points. The arches have a rise of 10 feet. The bridge superstructure, consisting of the center pier and foundations, was constructed of stone masonry. The arch fill material is comprised of earth, approximately 1 foot deep at the crown. The bridge roadway wearing surface is bituminous concrete.

The Allentown Road Bridge has severely deteriorated. The arch barrels are in advanced stages of deterioration, with more than 50 percent of the stones loose or missing. The wing walls contain large sections that are in danger of partial collapse, with stones bulging out of plane and missing mortar. Repeated vehicular impact has damaged the frequently repaired parapet walls. In addition to these superstructure problems, there is extensive silting of the stream bed, and there are some areas of scour under the arches.

Rehabilitation schemes for the existing bridge have been evaluated and determined unfeasible. The bridge will be demolished, and a replacement will be built to carry Allentown Road across Skippack Creek.

SITE PLAN



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